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ABSTRACT

This paper presents findings of a study that explored the changing roles of principals and other school leaders in Israel as the system moves toward autonomous school organization. Specifically, the study examined the extent to which principals employed supervisory behaviors, teacher-activating behaviors, and school-restructuring initiatives. Data were gathered from a survey of about 550 graduates of 12 educational administration classes (1981-92) at a large urban university in Israel. A total of 218 surveys were returned, a response rate of almost 40 percent. Overall, two configurations emerged from the data. The first was that personal encouragement of teachers to enhance their participation in school management was common in more strictly organized and authoritarian school organizations. The second was that a combination of supervisory climate and consensual leadership more often characterized principals of restructuring schools. Findings indicate that school restructuring required more time, energy, and thought than did teacher empowerment. Furthermore, school-improvement activities were not related to teacher-activating behaviors. The assumption that increased teacher autonomy and professional authority contributes to teacher productivity was not substantiated. Surprisingly, restructuring behaviors appeared to be supplemented by intensive supervisory behaviors. It seems that school restructuring is an administrative accomplishment whose success depends on the principals' administrative authority, vision, and leadership. Two tables are included. Contains 15 references. (LMI)

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Educational Leaders' Influencing Behaviors and School Restructuring

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Purpose

The purpose of the paper is to explore, by means of a quantitative field study, the changing roles of principals and other school leaders in Israel as the system moves towards autonomous school organization. Specifically, the research questions are:

1) To what extent do principals employ influencing behaviors such as supervisory behaviors, teacher-activating behaviors with teachers as role partners, and school restructuring initiatives?

2) What administrative and leadership characteristics of principals and schools are related to their tendencies to activate teachers and to engage in restructuring initiatives?

3) Of special interest is the question: to what extent does activating teachers to become involved in the school management support or interfere with the principal's initiatives to restructure and transform the school organization and its culture?

Introduction

In Israel, as in many other countries around the world, rapid system-wide efforts for educational improvement have recently been characterized by a school-based orientation. The impetus for school restructuring is moving in the direction of increased school autonomy, teachers' empowerment and transformational school leadership (Ben-Dror 1994; Guthrie 1990).

School restructuring programs in Israel, geared towards improvement of the autonomous local school, require reorganization of the school leaders' roles and their relationships among themselves, with the teachers and with other partners, such as central and local formal authorities, students and parents.

Haymann, Posner and Shapira (1994) describe the road to school autonomy. Principals in Israel report frequent system-wide change, among others in the areas of curriculum, administration and teacher involvement. They state that activating teachers to collaborate with the school leadership is one of the principals' major missions (Harrison, 1994). A study of 1,493 elementary schools in the public sector showed that 87% of the principals recently first defined, or redefined, the particular mission of the school, 50% reported new channels for collaboration with parents, 54% reported recent development and implementation of a new curriculum (pp. 191-192). In restructuring the school's mission, its organization and climate, principals assume new leadership positions alongside their role partners. In developing school-based curricula, designing evaluation methods, formulating polices and allocating resources, they also try to establish a cohesive school community. Through regular transactional interactions and and frequent restructuring initiatives they assume the role of transformational leaders (Leithwood 1993).

It is generally accepted that in order to build a school community it is necessary to influence teachers to identify with the need for restructuring, participate in school management, and work to the best of their ability to accomplish the new school mission. It is assumed that in the school leaders' restructured role as facilitators of school changes, they will influence teachers to collaborate in school restructuring (Goldring & Rallis 1993). Reitzug (1994) deals with school leader influencing behaviors. According to this analysis, school principals, as leaders, employ two strategies in influencing their role partners. First, the principals have to show the directions that lead to attainment of the organizational goals. Second, they have to influence the teachers to make the necessary efforts to accomplish these goals. Both of these strategies are achieved by different specific behaviors of the school leaders.

It seems, however, that while influencing behaviors are directed mostly towards the school teachers, who are subject to formal authority, directive behaviors are communicated to external role partners, such as local authorities, parents and other clients; namely, these who are interested in school change.

Two complementary kinds of influencing behaviors are usually adopted by the school leaders in their attempts to cause teachers to improve their productivity. One is supervisory behavior, by which principals exercise their formal authority. Examples of such behaviors are hiring and firing, and establishing feedback procedures. The second is collaborative behavior, which aims at empowering teachers, giving them a greater voice in school affairs. Specific activating behaviors are shared decision making, non-intervening, remote management, what is known as "management by exception", and tangible rewards. Both kinds of interaction - the supervisory and the collaborative - between the school leadership and the body of teachers are often defined as transactional leadership. It operates within the existing organizational system, reflects the cultural norms of the specific workplace, and directs the ongoing negotiations between management and employees (Silins, 1992).

Transformational leaders are different from transactional leaders in the sense that they change the organizational system and its cultural norms. Their interactions with the teachers are influenced by external agencies, which demand new kinds of educational products and new ways of school management. Silins (1992) distinguishes between transformational and transactional leaders. Transformational leaders tend to support innovations and changes, whereas transactional leaders tend to maintain maximal efficiency in school work. Silins reports that transformational leaders, who frequently initiate changes, have little influence upon the teaching force but greater influence on parents and students and on the school system as an educational environment.

On the other hand, transactional principals tend to collaborate with teachers more frequently than transformational principals. It seems that giving teachers a share in decision making and administrative power weakens the principal's leadership position. This, in turn, interferes with the process of school restructuring.

In addition to the two categories of influencing behavior which are employed by school leaders to activate teachers: supervisory and collaborative behaviors, they also employ a third category of behavior, which relates indirectly to the teachers. The third category deals with initiatives for school restructuring; namely, activities aimed at school improvement.

It is probable that in the Israeli context, the school leadership's success in leading teachers to contribute to school improvement, and its success in initiating positive school changes, depend on two sets of independent variables. The first set relates to the school leaders' administrative expertise, while the second set refers to their leadership capabilities, namely their ability to influence the teachers, the educational authorities and the public at large to do more for school improvement.

The School Principal as Professional Administrator

The school principal is in charge, first of all, of the school's regular maintenance as a client oriented organization. It seems that the key to the principal's success in executing this task lies in handling and motivating the teachers under his/her authority to perform their jobs as officially defined. The first paragraph in the new official description of the school principal's role in Israel states that in performing their job, principals are asked to rely on their official administrative authority. On the other hand, the official regulations of the

Ministry of Education also suggest that the principal should "consult with the teachers about the planning and implementation of regular and new school programs, encourage their collaboration, ask for their responsible involvement in school restructuring and in developing a positive school climate." (Ministry of Education, 1994, p.6).

According to the official document, principals are expected to perform their main tasks by employing two different categories of influencing behavior - supervisory activity based on administrative authority, and collaborative activity based on charismatic leadership. Communication with teachers takes about a quarter of the principal's working time (Dark & Roe, 1986), and it requires more time and effort when the school is in a process of restructuring. Under the pressures of school improvement programs, teachers are expected to perform above and beyond the regular requirements of their job. In most cases, principals have limited resources to reward the teachers for their extra work, good will and responsibility. Therefore, they have to rely on their leadership abilities to encourage the teachers to help to the best of their ability in school restructuring.

Administrative authority is usually expressed in supervisory behaviors. It is assumed that teachers, as qualified semi-professionals employed in a bureaucratic organization, are familiar with all the regulations of their workplace. Supervisory behaviors are, therefore, external, specific and formal (Firestone & Wilson, 1989; Conley, 1990).

Some studies report that strict bureaucratic governance of the school frequently creates tensions and reduces the teachers' motivation to accommodate pedagogical innovations in their daily work. Thus, the teachers' collaboration in the restructuring efforts may not be forthcoming. There is some evidence that teachers do not share in decision making (SDM), and

administrative collaboration as a fair reward for the additional efforts required of them throughout the restructuring process is not satisfactory.

Weiss & Cambon (1994) report that teachers in innovative schools showed less collaboration with management than teachers in regular schools. "The relative greater movement in schools whose principals were committed to shared decision making, was due less to SDM then to their unremitting efforts to establish a vision for the school and to stimulate teaching innovation in line with that vision." (p. 297). They add that "Reformist principals in schools without SMD were able to implement changes more rapidly because they did not need to negotiate with teachers." (p. 297).

It seems that principals' success in influencing teachers to take part in school restructuring depends on their formal authority and supervisory behaviors as much as on their leadership abilities and collaborative efforts.

The Principal as a Charismatic School Leader

Leadership in the workplace differs from public leadership in many ways. School leaders' interactions with their employees are influenced by formal daily matters that do not arouse emotional enthusiasm. Principals employ bureaucratic authority and control over means, working arrangements and regulations. They also enjoy the power of rewarding those who collaborate with the leadership authority, and of punishing recalcitrant employees. The principal's relationship of formal authority with his/her employees usually interferes with the symbolic attraction and emotional dimensions associated with charismatic leadership (Duke 1989). Nevertheless, research findings attribute great importance to the principal's leadership as an independent factor both of school maintenance and school improvement.

In this study, the principal's leadership characteristics were measured according to the conceptual framework of Hogan, Curphy & Hogan (1994). Two of the five dimensions of leadership were dealt with in this study. The first dimension is Agreeableness. The operational aspect of this concept is the leader's ability to bring his/her audience and peers to agree with one another, especially on controversial issues. It also indicates sensitivity to social values, moral considerations and educational goals. The second dimension deals with the leader's appearance and personal influence. Hogan et al. name it Surgency. The practical measurement of Surgency deals with the leader's appearance, verbal fluency, persuasive ability, and so forth.

The public, school professionals and formal authorities expect school leaders to do their job effectively enough to solve the grave conflicts they face in their daily work. In Israel's educational system this means reducing academic failure, solving disciplinary problems, lessening social and educational inequality, and preventing cultural, inter-religious and inter-ethnic conflicts. Because of the ongoing difficulties in struggling with these challenges, the educational system as a whole, and school principals in particular, constantly need to renew their sources of authority, working methods, curriculi and channels of communication. Special attention is given to organizational and technological innovations aimed at facilitating school restructuring and democratic governance. To achieve these goals, school leaders have to use both their administrative authority and power of leadership.

Research Questions and Hypotheses

The basic question of this study is: to what extent do school leaders initiate and promote new strategies of school management and new programs of study and work, and to what extent is the variance in this dynamic behavior explained by other variables, such as administrative position, charismatic leadership, supervisory and teacher-activating behaviors of principals and other school leaders. More specifically, it is hypothesized that the variance in the School-Restructuring Initiatives Scale is explained by four sets of variables: 1) Background variables; 2) Administrative variables (including supervisory behavior scale); 3) Leadership variables; 4. Teacher-activating behavior scale. Considering the possible difficulties in encouraging teachers' participation in school management on the one hand and initiating school restructuring programs on the other hand, special attention is given to school leaders' efforts to encourage teachers' participation. The Teacher-Activating Behavior Scale serves first as a dependent variable, and then as an explanatory variable in the regression analysis of the School Restructuring Initiatives Scale. The purpose of the analysis is to test the hypothesis that teacher-activating behaviors are associated with school restructuring initiative and positively contribute to it.

Methodology

The research hypotheses were tested by a quantitative follow up study. The sample consisted of graduates of 12 classes (1981-1992) of educational administration programs in a large urban university in Israel. Of about 550 graduates, 218 responded in detail to a 92-item anonymous questionnaire (the response rate was 39.6%). The questionnaire was developed after initial visits to some of the schools, talks with groups of school leaders, and observation of teacher/administrator seminars regarding school

restructuring. Most of the respondents were working as school administrators at the time of the study. Many of the non-responding graduates had either left the educational work force or served as classroom teachers. As most of the questions dealt with administrative issues and behaviors, many classroom teachers probably saw no sense in answering them.

The research scales were developed on the basis of factor analysis and reliability analysis. All the scales are based on Likert Type items and range from 1 (no agreement) to 7 (full agreement) with the item. Regression analyses were performed to examine relationships between the variables.

Table 1 presents the statistical features of the research variables.

Table 1. Means, Standard Deviations, Number of Items and Reliability Coefficients of the Research Variables and Scales (N=218)

	Means	S.D.	No. of items	Cronbach's α	Pearson's r with Admin. Position
Background variables					
Gender (1=M, 2=F)	.68	.47	1	--	-.03
School size (no. of classrooms)	21.51	8.83	1	--	-.23*
Administrative Variables					
Administrative Position (0=Assistant, 1=Principal	.40	.44	1	--	1.00
Supervisory behaviors	5.74	1.23	9	.77	.24**
Leadership Variables					
Agreeableness	3.54	.93	6	.52	.10
Surgency	5.91	.65	9	.62	.19*
Dependent Variables					
Teacher-Activating Behavior	4.64	1.03	6	.70	.39**
Restructuring Initiatives	5.09	.91	7	.62	.09

* P<.05

The data in table 1 describe the three variables and the five scales included in the study. The Cronbach's α coefficients of 4 of the scales are satisfactory. The Cronbach's α of the Agreeableness Scale is only .52, which is low and requires careful interpretation. Typical items in the Supervisory Behaviors Scale are: "Supervising the teachers' work requires

time, thought and energy"; "The appointment of teachers to administrative position requires time, thought and energy"; "Promoting fair labor relations among the school staff requires time, energy and careful consideration". Items in the Teacher-Activating Behavior Scale are, for example: "Encourages teachers to share in decision making processes"; "Plans and directs meetings of teachers"; "Helps teachers to solve personal problems". Items in the School Restructuring Initiatives Scale include, for example: "The school management supports in-service staff development"; "Collaborates with public leaders in defining the school mission".

Findings

Some descriptive findings are presented in table 1 above, which shows that females constitute 68% of the sample. This percentage corresponds approximately to their percentage in the full sample of graduates of educational administration programs. About 60% of the respondents are school principals and 40% are assistants such as vice-principals, program-chairs and other administrators. The administrative position correlates positively with the scales of Supervisory behaviors, Surgency Scale and Teacher-Activating Behaviors Scale. It does not correlate with the main dependent variable: School Restructuring Initiatives Scale.

School leaders report that regular supervisory activities are more demanding and time consuming (scale mean = 5.74) than School Restructuring Initiatives (scale mean = 5.09) and Teacher-Activating Behaviors (scale mean = 4.64).

The finding that average school leaders report being more preoccupied with regular administrative duties than with activating teachers in school affairs suggests that the typical Israeli school resembles a bureaucratic organization rather than a collaborative social organization.

The quantitative analysis of variance in the main dependent variable of the study, the school leaders' tendency to initiate school restructuring activities, was done in two steps. First, a multiple regression analysis of the variance of the Teacher-Activating Behaviors Scale was performed. Second, this scale was added to the other independent variables in order to explain the variance of the School Restructuring Activities Scale.

Table 2 reports the finding of the two regression analyses:

Table 2. Two Multiple Regression Analyses of Teacher-Activating Scale, Behaviors Scale and Restructuring Initiatives Scale on Background Administrative and Leadership Variables (N=218)

	Dependent Variables			
	Teacher-Activating Behavior Scale		School Restructuring Behavior Scale	
Independent Variables	b	β	b	β
Background variables				
Gender (1=M, 2=F)	-.505*	-.208*	.083	.113
School size	-.102	-.013	-.013*	-.124*
Administrative Variables				
Administrative Position	.260*	.601*	-.135	-.073
Supervisory behaviors	.213*	.243*	.416*	-.456*
Leadership Variables				
Agreeableness	-.033	-.040	.262*	.270*
Surgency	.387**	.668**	-.071	-.051
Dependent Variable				
Teacher-Activating Behaviors	---	---	.099	.125
Constant	.404		2.062	
R^2	.447**		.361**	

* p<.05, **p<.01

The first regression analysis indicates that the variance of the Teacher-Activating Behavior Scale is significantly ($p<.001$) and meaningfully explained by six variables ($R^2=.447$). Males more than females, principals more than others, and surgent school leaders who exercise supervisory behaviors, tend to exercise teacher-activating behaviors more often than other school administrators. It seems that teachers' participation is activated by more dominant school leaders (males, principals, influential persons).

The results of the second regression analysis are also significant ($p<.001$) and meaningful ($R^2=.361$). Three variables, each from a different set, are of greater explanatory power than others. School restructuring behaviors are more common in small schools than in large ones, they are associated with high frequency of supervisory behaviors and are employed more often by school leaders who pursue agreement on social goals than by others.

The main finding of the regression analyses is that the tendency to encourage teachers' involvement in school affairs <u>is not</u> related to the leaders' efforts to restructure their schools. The b value of the Teacher-Activating Behaviors Scale in explaining the variance of the School Restructuring Activities Scale is not significant.

A comparison of the two regression analysis indicates that the two main kinds of behavior under study are different and not related to one another. Not only is the Teacher-Activating Behavior Scale not correlated with school restructuring, but the variables which explain the variance in the first dependent variable are different from the variables related to the second dependent variable. While encouragement of teachers' participation is related to bureaucratic features in the school, school restructuring behaviors are reported more often in the

schools of principals who tend to support agreeableness on the one hand, but also frequently exercise supervisory behaviors on the other hand. They also occur more often among low level administrators, females as often as males, in small schools.

Altogether, two strange configurations emerge from the data analysis. The first is that personal encouragement of teachers to enhance their participation in school management is common in more strictly organized and authoritarian school organizations. The second is that a combination of supervisory climate and consensual leadership more often characterizes principals of restructuring schools.

Discussion

Recent literature on role performance recommends encouraging teachers to be more involved in decision making processes and to participate in the management of the school. The call for teacher empowerment has been accompanied by severe criticisms of the traditional hierarchical administrative conceptions of school management (Goldring & Chen 1992). It is frequently claimed that teacher empowerment is especially necessary when educational leaders are engaged in school improvement programs and many additional efforts are expected from everybody.

Conceptual analysis suggests that teacher empowerment is an appropriate reward for teachers' extra contribution to school improvement. However, the findings indicate that school restructuring activities are strongly associated with administrative variables, namely, supervisory behaviors. The administrative variables' net contribution to the variance in restructuring behaviors is much greater than the net contribution of the leadership variables to the same dependent variable. Furthermore, it is greater than the contribution of the administrative variables to the variance in the Teacher-

Activating Behaviors Scale. The finding that school restructuring activities require both intensive supervisory behaviors and socially oriented leadership has recently been reported by several researchers (Silins 1992; Reitzug 1994).

It seems that by promoting school restructuring, school leaders try to change the framework of their school, establish a new organizational structure and encourage teachers to improve educational outcomes. Such principals are described as transformational leaders, as distinct from transactional leaders, who work according to the existing authority system. The later assume that teachers, as professionals, require little supervision and guidance in the course of their daily work in a well organized system. No new directions are needed. "The leader avoids giving directions if the old ways are working and allows followers to continue doing their jobs as always if performance goals are met." (Silins 1992, p. 319).

Transactional leaders encourage teachers to excel through intrinsic rewards They recognize the teachers' regular needs and try to satisfy them. Reitzug (1994) claims that both styles of leadership, the transformational and the transactional, serve the same function: to influence the thoughts and actions of other people, and direct the organization toward the accomplishment of these goals. Both traditional (transactional) and cultural-management (transformational) perspectives are criticized for their limitations in ameliorating the dependent condition of teachers as frustrated professionals. While transactional leadership is a well known form of authority and control, transformational leadership "sells" concepts of organizational direction and practice. Because of this tendency to "sell", transformational leadership is sometimes considered manipulative (Reitzug, 1994, p.284).

In conclusion, the present study dealt with the transactional-

transformational dichotomy, using a quantitative field study. The hidden question was whether teacher-activating behaviors by school leaders in the name of school restructuring can be considered manipulative behavior. To what extent does teachers' involvement replace traditional supervisory behaviors, and to what extent are they mutually correlated and support each other? The findings indicate, first of all, that school restructuring requires more time, energy and thought than does teacher empowerment. Furthermore, school improvement activities are scarcely related to teacher-activating behaviors. The behaviors are not correlated. The current assumption, that through additional autonomy and increased professional authority teachers may increase their contributions and productivity, was not corroborated by the research findings. Surprisingly enough, it seems that restructuring behaviors are supplemented by intensive supervisory behaviors.

In Israel, when school principals wish to restructure their schools they tend to rely on their formal authority rather than on their personal influence or on encouraging the teachers to be involved in school decision making.

Very many schools in Israel have been successfully restructured and in many schools a high level of teacher participation is reported. It seems, however, that the two processes are not correlated. The demanding processes of school restructuring seem to depend almost entirely on the principals' initiatives and leadership. It seems that school restructuring is an administrative accomplishment whose success depends on the principals' administrative authority, vision and leadership.

References

Ben-Dror, G. 1992. The School of The Future, Jerusalem: Ministry of Education Publications Dept. 28 p. (Hebrew).

Conley, S. C. 1990. "A Metaphor for Teaching: Beyond the Bureaucratic-Professional Dichotomy." In Education Reform, (ed.) Bacharach, S. Boston: Allin and Bacon.

Dark, T. L. and Roe, H. W. 1986 The principalship. New-York: Macmillan.

Duke, D. L. 1989. "The Aesthetic of Leadership." pp. 345-365. In School Leadership, (ed.) Burdin, J. L. Newbury Park: Sage.

Goldring, E.B. and Chen, M. 1992. "Preparing Empowered Teachers for Educational Leadership Positions in Post-Reformed Schools". Planning and Changing, 23 (1) pp. 3-14.

Goldring, E. B. and Rallis, S.F. 1993. Principals of Dynamic Schools. Newbury Park: Crowin Press.

Guthrie, J. W. 1990. "The Evaluation of Educational Management: Eroding Myths and Emerging Models." pp. 210-231. In Educational Leadership and Changing Context of Families, Communities and Schools, (eds.) Mitchell, B. and Cunningham, L. L. Chicago: University of Chicago Press.

Harrison, J. A. 1994. Unity and Diversity of Culture and Curriculum in the Israeli Educational System. Research Report published by the Institute for the Study of Educational Systems, Jerusalem.

Haymann, F. Posner, Y and Shapira, R. 1994. "The Road to School Autonomy: A Survey of Attitudes." In School Autonomy: The Study of its Implementation, (eds.) Shapira, R., Green, R. and Danilov, Y. Jerusalem: Ministry of Education Pedagogical Secretariat (Hebrew).

Hogan, R., Curphy, G.J., and Hogan, J. 1994. "What We Know about Leadership: Effectiveness and Personality". American Psychologist, 49 (6) pp.593-504.

Leithwood, K. 1993. "Contribution of Transformational Leadership to School Restructuring." An invited address to the 1993 Convention of UCEA, Huston, USA.

Ministry of Education and Culture. 1994. "The Director-General's Circular, Special Issue #6. Role Incumbent in School: Memorandum." Jerusalem: Government Press, 28 p.

Silins, H. C. 1992. "Effective Leadership for School Reform". The Alberta Journal of Educational Research 38:317-334.

Reitzug, U.C. 1994."A Case Study of Empowering Principals' Behavior." American Educational Research Journal, 31:283-309.

Weiss, C.H. and Cambon, J. 1994. "Principals, Shared Decision Making and School Reform." Educational Evaluation and Policy Analysis, 16:287-301.